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ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 09/872,052 05/31/2001 Robert S. Matson 1810A-045 (81841.0192) 8141 EXAMINER 07/12/2006 46267 **HOGAN & HARTSON LLP** LAM, ANN Y **500 S GRAND AVE** ART UNIT PAPER NUMBER **SUITE 1900** LOS ANGELES, CA 90071 1641

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)
09/872,052	MATSON ET AL.
Examiner	Art Unit
Ann Y. Lam	1641

Advisory Action Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 05 June 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires <u>3</u> months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPÉP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on . A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: _____. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. Tor purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 55-71. Claim(s) withdrawn from consideration: . . . AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. \(\subseteq \) The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

See Continuation Sheet.

12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s).

13. Other:

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Continuation of 11, does NOT place the application in condition for allowance because: Applicant's arguments are not persuasive for the reasons as follow. Applicant submits on page 6 of the response that Applicant's statement, i.e., the alleged admission at issue, that attempts to attach unmodified biopolymers without linkers were unsuccessful and abandoned, does not constitute a suggestion or motivation to try such an attachment, and also as a result, there is no reasonable expectation of success. This argument is not persuasive because an attempt to try an attachment of unmodified biopolymers is not the grounds for rejection set forth in the Office action. Rather, the rejection is based on the admission that such an attachment of unmodified biopolymers has already been done, i.e., known or used. Applicant's admission does not state that only attempts to try such an attachment has been performed. Rather, it states that the methodology, i.e., the methodology of attachment of biopolymers via availale terminal amino groups, has been abandoned. The statement does not state that attempts were unsuccessful, as Applicant now submits. Applicant also argues on page 7 that Swayze fails to teach or suggest the use of acyl fluoride to functionalize a solid support to further attach a biopolymer. Applicant asserts that the solid supports of Swayze are particles of glass or polymeric resins, none of which have acyl functionalities, and that even if the scaffolds were to be viewed as solid supports, there is still no teaching of acyl fluorides to attach any moiety. Applicant states that the attachment involve an amine or hydroxyl pendant on the scaffold by a reactive group pendant on the moiety to be attached, i.e., the building block, and that, for example, the product of the reaction between an acyl fluoride and an amine is an amide linkage binding the support-bound scaffold to the building block which carried the acyl fluoride functionality. In response, the Office asserts that this is the teaching of attachment to a moiety, (that is, as Applicant states, the building block), and Swayze is relied upon for its teaching of acyl fluoride as a coupling agent (col. 108, lines 49-53). Applicant also argues on page 8 that Swayze fails to teach or suggest attachment of biopolymers to solid supports, because the scaffolds are not solid supports, and assuming that they are solid supports. Swayze teaches attachment of building blocks, which may include some biologically derived moieties, e.g., amino acids, to the scaffold, and these building block class does not include biopolymers. The Office maintains that the biopolymers are admitted in Applicant's statement at issue, and Swayze is relied upon by the Office for the teaching of acyl fluorides to couple molecules to the solid support, and that the solid support is the scaffold itself, or the support includes the scaffold. Applicant asserts on page 8 that the scaffolds are monocyclic and bicyclic amine compounds, and that because this is a freely soluble nanometer-scale molecule, it would not be classified as a solid support, or the equivalent of a solid support. The Office maintains that the scaffold, even if formed from nanometer-scale molecules, is a solid support, or is part of the solid support. Applicant also argues on pages 8 to 9 that since the scaffold is so dissimilar to those of biopolymers, the chemical reactivities of the scaffolds would not be expected to approximate those of biopolymers. This is not persuasive because the grounds for rejection does not rely on chemical reactivities of the scaffold to approximate those of biopolymers. Rather, it relies on the teachings of the chemical reactivities of the acyl fluoride to molecules, such as biologically derived moieties, to attach biopolymers. Applicant summarizes on page 9 that Swayze's use of acyl fluoride functionalities pendant upon building blocks to attach support-bound scaffolds to building blocks would not be considered by one of ordinary skill in the art to be useful predictor of the utility of acyl fluoride functionalities pendant upon solid supports for attaching biopolymers to solid supports. This is not persuasive because Swayze teaches that the acyl fluoride is a coupling agent (col.108, lines 31-53 and col. 112, lines 17-20). Applicant also argues on page 11 that Barany uses modified ends and linkers. Applicant points to column 26, lines 7-23) which states, inter alia, that the oligonucleotides are conjugated to supports that have been modified. This is not persuasive because this statement only states that the support is modified, not the DNA. Column 26 also states that "[i]n one variation, the terminus of amino functionalized DNA is modified..." This is not persuasive because this particular embodiment taught by Barany is not relied upon by the Office in the rejection. Likewise, Applicant points to other parts of the reference to show that the biopolymers are modified. These are not persuasive because the disclosure of these embodiments are not relied upon by the Office in the rejection. Rather, the Office relies on the teachings of Barany in column 26, lines 36-40, of the attachment of pre-synthesized probes, or by direct assembly and sidechain deprotection (without release of the oligomer) onto the support. Nothing in the reference teaches that these pre-synthesized probes or directly assembled probes are modified or use linkers for attachment.